

WHAT IS CLAIMED IS:

1. A honeycomb sandwich panel comprising:
a honeycomb core having a number of cells
extending therethrough in a thickness direction of the
5 honeycomb core; and
a front surface layer and a rear surface layer
provided on both sides of the cells in the thickness
direction of the honeycomb core and closing openings of
the cells, at least one of the front surface layer and
the rear surface layer being made of a fiber reinforced
10 plastic using a phenolic resin as a matrix.

2. A honeycomb sandwich panel according to
claim 1, wherein each of the front surface layer and
the rear surface layer is made of at least a single
15 layer.

3. A honeycomb sandwich panel according to
claim 1, wherein each of the front surface layer and
the rear surface layer is made of a carbon fiber
reinforced plastic using a phenolic resin as a matrix.

20 4. A honeycomb sandwich panel according to
claim 1, wherein each of the front surface layer and
the rear surface layer is made of a glass fiber
reinforced plastic using a phenolic resin as a matrix.

25 5. A honeycomb sandwich panel according to
claim 1, wherein the honeycomb core is made of a light
metal.

6. A honeycomb sandwich panel according to

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claim 1, wherein the honeycomb core is made of a material selected from the group consisting of Nomex and a glass fiber reinforced plastic.

5 7. A honeycomb sandwich panel for use in an interior material of a spacecraft comprising:

a honeycomb core having a number of cells extending therethrough in a thickness direction of the honeycomb core; and

10 a front surface layer and a rear surface layer provided on both sides of the cells in the thickness direction of the honeycomb core and closing openings of the cells, at least one of the front surface layer and the rear surface layer being made of a fiber reinforced plastic using a phenolic resin as a matrix.

15 8. A honeycomb sandwich panel according to claim 7, wherein each of the front surface layer and the rear surface layer is made of at least a single layer.

20 9. A honeycomb sandwich panel according to claim 7, wherein each of the front surface layer and the rear surface layer is made of a carbon fiber reinforced plastic using a phenolic resin as a matrix.

25 10. A honeycomb sandwich panel according to claim 7, wherein each of the front surface layer and the rear surface layer is made of a glass fiber reinforced plastic using a phenolic resin as a matrix.

11. A honeycomb sandwich panel according to

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claim 7, wherein the honeycomb core is made of a light metal.

12. A honeycomb sandwich panel according to
claim 7, wherein the honeycomb core is made of
5 a material selected from the group consisting of Nomex
and a glass fiber reinforced plastic.